

PROGRAM

65th Annual Meeting

Federation of American Societies
for Experimental Biology

Atlanta, Georgia

April 12-17, 1981

The
American
Physiological Society
American Society for Pharmacology
and Experimental Therapeutics
American Association of Pathologists
American Institute of Nutrition
The American Association
of Immunologists
Guest Societies

FASEB81

D-11 V 1738. Hemodynamic variability in short term renal hypertension. S. BOHONK* AND C. M. FERRARIO. *Cleveland State Univ. and Cleveland Clin. Fndn.*

D-12 VI 1739. Increased levels of a digitalis-like factor (endoxin) in hypertension. K. A. GRUBER,* J. M. WHITAKER,* L. L. RUDEL,* B. C. BULLOCK* AND V. M. BUCKALEW, JR.* (SPON: N. S. SKINNER). *Bowman Gray Sch. of Med.*

D-13 IV 1740. Echocardiography of left ventricular hypertrophy in labile and in stable hypertensive patients. H. F. LOYKE, E. SANTIAGO* AND D. HAGHIGH.* *St. John Hosp., Cleveland.*

D-14 V 1741. Hypertension in Clemson University students. D. M. MEDEIROS* AND R. F. BORGMAN. *Clemson Univ.*

*Left-hand number is space assignment. Roman numeral indicates minimum time poster will be manned.

D-15 VI 1742. Chronic cadmium effects on blood pressure, catecholamines, heart and renal histology in mice. D. ELY, R. MOSTARDI AND M. VAJDI.* *Univ. of Akron.*

D-16 IV 1743. Activation of prostacyclin in ischemic kidneys. A. BUTKUS AND R. E. CHATELAIN.* *Cleveland Clin. Fndn.*

D-17 V 1744. Evidence for a role of a native angiotensin-converting enzyme inhibitor in the induction of hypertensive arterial disease. J. A. DONOHUE,* W. G. CAMPBELL, JR. AND L. H. DUKET.* *Emory Univ. Sch. of Med., Atlanta.*

D-18 VI 1745. Effects of sodium chloride and deoxycorticosterone on aorta elastin synthesis in the growing chick. R. GARDNER,* M. PENNER* AND R. B. RUCKER. *Univ. of California, Davis.*

D-19 IV 1746. Sodium retention during induction of necrotic hypertensive arterial disease. W. G. CAMPBELL, JR., J. A. DONOHUE* AND L. H. DUKET.* *Emory Univ. Sch. of Med.*

THURSDAY MORNING

Learning Resources Center: Teaching Materials and Methods

Daily, MON. through THURS. 8:30 AM-5:00 PM—
CONGRESS CENTER, EXHIBIT HALL

For abstract titles and times, see page VIII.

SYMPOSIUM: Dehydration-Induced Drinking: Peripheral and Central Aspects

THURS. AM—ATLANTA HILTON, BALLROOM WEST

Chaired: J. E. GREENLEAF AND M. J. FREGLY

9:00 Introduction.

9:15 Dehydration-induced drinking in man. J. E. GREENLEAF. *NASA-Ames Res. Ctr.*

9:40 Osmoreceptors, vasopressin secretion and drinking in man. G. L. ROBERTSON. *Pritzker Sch. of Med.*

10:05 Thermogenic drinking: osmoreceptors and angiotensin II receptors. M. J. FREGLY. *Univ. of Florida.*

10:30 Dehydration-induced drinking: central aspects. M. I. PHILLIPS. *Univ. of Florida.*

10:55 Osmoreceptor mediation of thirst and vasopressin secretion in the dog. T. N. THRASHER. *UCSF.*

11:20 Termination of drinking: satiation.* E. F. ADOLPH. *Univ. of Rochester.*

11:45 General discussion.

SYMPOSIUM: Lung Neuroendocrine Cells and Regulatory Peptides: Distribution, Functional Studies and Implications, Session I

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The Council for Tobacco Res.-
USA, Inc.

THURS. AM—CONGRESS CENTER, ROOM 300

Chaired: S. LEEMAN AND V. E. GOULD.

8:30 Introduction. J. A. WILL. *Univ. of Wisconsin.*

8:40 Neuroendocrine cells of the lung: morphology and development. E. M. CUTZ. *Sick Childrens Hosp., Toronto.*

9:05 Development of neuroepithelial bodies in the fetal rabbit lung. S. SOROKIN. *Harvard Univ.*

9:25 Neuroendocrine cells in the hamster lung: distribution, subtypes and possible function. R. HOYT, JR. *Boston Univ. Sch. of Med.*

9:45 Neuroendocrine related biochemistry in the spectrum of human lung cancer. S. BAYLIN. *Johns Hopkins Med. Sch.*

10:05 Effects of diethylnitrosamine on lung neuroendocrine cells. I. LINNOILA. *NCI, NIH.*

10:25 Regulatory peptides and the lung. J. M. POLAK AND S. R. BLOOM. *Royal Postgraduate Med. Sch., Hammersmith Hosp., London, United Kingdom.*

11:05 Are the amphibian peptides, physalaemin and bombesin, regulatory peptides in mammalian gastrointestinal and pulmonary tracts? L. H. LAZARUS. *Endocrinology Group, NIEHS, Research Triangle Park.*

SYMPOSIUM: Lung Neuroendocrine Cells and Regulatory Peptides: Distribution, Functional Studies and Implications, II

Sponsored by: APS, AAP, NIEHS, NIH and The Council for Tobacco Res.-USA, Inc.

THURS. PM—CONGRESS CENTER, ROOM 300

Chaired: C. LENFANT

- 1:30 Novel vasoactive peptides in the lung: localization and physiological significance. S. I. SAID. *Univ. of Texas, Southwestern Med. Sch., Dallas.*
- 1:55 Isolation and characterization of rabbit fetal lung neuroendocrine cells. K. SONSTEGARD AND R. P. DIAUGUSTINE. *Endocrinology and Cell Biology Groups, NIEHS, Research Triangle Park.*
- 2:15 Neurally mediated relaxation of airway smooth muscle. L. DIAMOND AND J. B. RICHARDSON. *Univ. of Kentucky Col. of Pharm. and McGill Univ.*
- 2:35 Dynamics of the neuroendocrine cell-regulatory peptide system in the lung. I. KEITH AND J. A. WILL. *Univ. of Wisconsin.*

Roundtable Discussion.

- 3:00 Discussion Leader: J. RICHARDSON, *McGill Univ.*
All Chairpersons, All Participants
- Summary.
- 4:30 Summarizer: N. C. STAUB, *UCSF.*
- 4:45 Closing remarks.

SESSIONS

136. REGULATION OF THE CORONARY CIRCULATION*

THURS. PM—CONGRESS CENTER, ROOM 101

(IV) 1:30-2:30; (V) 2:30-3:30

Chaired: R. M. BERNE

1:30-3:30 POSTER PRESENTATIONS
3:30-4:30 Discussion.

* The first two hours of the session will be devoted to posters arranged around the room, half of which will be manned by authors in each of the first two one-hour periods. With all authors present, the third hour will be a general discussion.

Group IV posters will be manned from 1:30-2:30 and Group V from 2:30-3:30. All posters will be mounted during the half hour, starting at 1:00.

- 1-IV 1894. Artery-vein relationships in the human left ventricular myocardium: anatomic basis for metabolic regulation of blood flow. G. M. HUTCHINS, G. W. MOORE* AND E. V. HATTON.* *Johns Hopkins Univ. Sch. of Med.*
- 2-V 1895. Contribution of coronary vascular resistance and back pressure to autoregulation in the dog heart. W. P. DOLE* AND V. S. BISHOP. *Univ. of Texas Hlth. Sci. Ctr., San Antonio.*

- 3-IV 1896. Autonomic versus autoregulatory factors in the right coronary response to bilateral carotid occlusion in the conscious dog. P. A. MURRAY AND S. F. VATNER. *Harvard Med. Sch. and Peter Bent Brigham Hosp., Boston.*
- 4-V 1897. Neural limitation to coronary blood flow during hemorrhagic hypotension. E. E. SMITH, C. E. JONES AND P. J. YOUNG.* *Texas A&M Col. of Med.*
- 5-IV 1898. Influence of magnesium on responses of coronary arteries to vasoactive agents. P. D. M. V. TURLAPATY,* B. T. ALTURA* AND B. M. ALTURA. *SUNY, Downstate Med. Ctr.*
- 6-V 1899. Pericardial perfusate adenosine concentration and myocardial oxygen consumption in the conscious dog during normal physiologic stimuli. A. BACCHUS,* P. KOMWATANA,* E. REIMUND,* R. KNABB,* T. TSUKADA,* R. RUBIO AND R. M. BERNE. *Univ. of Virginia.*
- 7-IV 1900. Influence of adrenergic tone on cyclical coronary blood flow changes induced by partial stenosis. E. A. RAEDER,* R. L. VERRIER AND B. LOWN.* *Harvard Med. Sch. and Sch. of Publ. Hlth.*
- 8-V 1901. Calcium-dependent coronary spasm induced by adrenochrome in rat hearts. M. KARMAZYN,* R. E. BEAMISH,* L. FLIEGEL* AND N. S. DHALLA. *Univ. of Manitoba, Winnipeg, Canada.*
- 9-IV 1902. Myocardial blood flow during intra-coronary administration of adenosine. P. A. GWIRTZ* AND H. L. STONE. *Univ. of Oklahoma Hlth. Sci. Ctr., Oklahoma City.*
- 10-V 1903. Evidence that adenosine plays a secondary role in coronary reactive hyperemia. C. E. JONES, T. W. HURST* AND J. R. RANDALL.* *Texas A&M Col. of Med.*
- 11-IV 1904. Role of purines in acetylcholine-induced coronary vasodilation. J. SCHRADER, C. I. THOMPSON,* G. HENDLMAYER* AND E. GERLACH. *Univ. of Munich, Federal Republic of Germany.*
- 12-V 1905. Compartmentation of the cardiac adenosine pool. R. A. OLSSON, D. SAITO, D. G. NIXON* AND R. B. VOMACKA.* *Univ. of South Florida.*
- 13-IV 1906. Adrenergic innervation and peak tension development in proximal and distal coronary arteries. G. S. MALINDZAK, JR., C. L. BRIDGES-GILLIAM* AND J. L. WASSON.* *Northeastern Ohio Univ. Col. of Med.*
- 14-V 1907. Cardiovascular responses to parathyroid hormone in the dog after alpha or beta adrenergic blockade. M. F. CRASS III, M. S. CITAK* AND P. K. T. PANG. *Texas Tech Univ. Hlth. Sci. Ctr., Lubbock.*
- 15-IV 1908. Rise in myocardial PCO_2 after sequential coronary artery occlusions. T. FUKUI,* M. WACHTER* AND R. B. CASE. *St. Luke's Hosp. Ctr. and Columbia Univ.*
- 16-V 1909. Effect of loading conditions on a transmural lactate gradient in the left ventricular free wall and interventricular septum receiving no coronary flow. R. B. DUNN. *Chicago Med. Sch.*
- 17-IV 1910. Reactive hyperemia in experimental coronary sinus ligations. G. C. JANG,* P. PERIER,* L. L. BAILEY* AND V. J. JOHNS, JR.* (SPON: G. G. POWER). *Loma Linda Univ. Sch. of Med.*
- 18-V 1911. Role of acidosis in myocardial reactive hyperemia. C. R. STEINHART* AND D. G. NIXON* (SPON: R. A. OLSSON). *Univ. of South Florida. Col. of Med.*
- 19-IV 1912. Coronary vasodilation following a single ventricular extrastimulus in the conscious dog. G. G. SCHWARTZ,* P. A. McHALE AND J. C. GREENFIELD, JR. *Duke Univ. and Durham VA Med. Ctr.*
- 20-V 1913. Influence of psychologic stress on coronary vascular resistance in the conscious dog. R. L. VERRIER AND B. LOWN.* *Harvard Med. Sch. and Sch. of Publ. Hlth.*